R E P O R T R E S U M E S

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THE INFLUENCE OF SOCIAL CLIMATE ON ADULT ACHIEVEMENT--THE IMPACT OF A RESIDENTIAL EXPERIENCE ON LEARNING AND ATTITUDE CHANGE OF ADULT STUDENTS ENROLLED IN AN EVENING CREDIT CLASS.

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A COMPARISON WAS MADE OF THE AMOUNT OF LEARNING IN AN ADULT EVENING CLASS ON CAMPUS WITH THAT OF AN EXPERIMENTAL CLASS WHICH ATTENDED SESSIONS ON CAMPUS AND SPENT TWO WEEKENDS AT A UNIVERSITY RESIDENTIAL CENTER. IT WAS EXPECTED THAT THE EXPERIMENTAL CLASS WOULD LEARN MORE AND EXPERIENCE POSITIVE CHANGES IN ATTITUDE AS COMPARED WITH THE CONTROL CLASS. THE SAME INSTRUCTORS WERE USED FOR BOTH GROUPS. IN ORDER TO CONTROL METHOD OF INSTRUCTION AS A VARIABLE, THE LECTURE-DISCUSSION METHOD WAS USED IN BOTH GROUPS. PRETESTS OF INTELLIGENCE, ATTITUDES, AND SUBJECT KNOWLEDGE WERE GIVEN TO ALL, AND ATTITUDE AND SUBJECT KNOWLEDGE TESTS WERE REPEATED AT THE END OF THE TERM. THE EXPERIMENTAL GROUP ALSO COMPLETED A FINAL EVALUATION QUESTIONNAIRE. THE EXPERIMENTAL GROUP WAS SIGNIFICANTLY MORE INTELLIGENT, BUT NO SIGNIFICANT DIFFERENCES SHOWED UP IN EITHER THE PRETEST OR POST-TEST OF ATTITUDES OR SUBJECT KNOWLEDGE. THE EXPERIMENTAL GROUP ENJOYED THE SOCIAL SETTING AT THE RESIDENTIAL CENTER BUT DID NOT FEEL MORE LEARNING OCCURRED THERE. RATHER, THE PERIODS BETWEEN SESSIONS WERE SEEN AS DETERRENT TO LEARNING. (EB)

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WASHINGTON UNIVERSITY

Saint Louis, Missouri

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and

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THE INFLUENCE OF SOCIAL CLIMATE ON ADULT ACHIEVEMENT:

The Impact of a Residential Experience on Learning and Attitude Change of Adult Students Enrolled in an Evening Credit Class

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and

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An Overview

In analyzing the learning environments of day-division students and their evening-division counterparts, educators have commented on marked differences in their social milieus. By this they have meant that full-time students in day-division programs generally have more opportunities to relate in meaningful ways with fellow students and with faculty. These educators assume that learning is augmented and attitudes, toward higher education in general and the specific institution in particular, are favorably influenced by the day students' opportunities for peer group and faculty contacts. Evening-division administrators, who tend to emulate the day-division offerings, have often developed similar evening opportunities such as student honor societies, social clubs, and have provided recreation and leisure activities to promote further interaction among their students and faculty.

In recent years there has been a movement toward the establishment of university adult residence centers for varied programs of continuing education. Some of these, such as the Kellogg supported centers, are centrally located in parent campuses. Others are remote retreat centers whose sponsors claim that more efficient and effective learning occurs when the adult enrollees are "out of reach" of their day-to-day job situations. One of the most recent Kellogg Centers is at Oxford University in England. There, based on the assumption "that a university is a band of scholars living as a community and working together in an intellectual pursuit,"[1] the Oxford version of a residential center is

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1. Jessup, Frank. Secretary, Delegacy for Extra-Mural Studies, University of Oxford, Continuing Education Report, Number Four, University of Chicago, 1965.

found at Rewley House. Implied in this assumption is the factor of time together. The dimension of time may not be receiving sufficient scrutiny in the modern concept of residential centers. The bands of scholars gathered in the early university residence settings were cloistered for long periods of time as they exchanged information and shared experiences.

Houle[2] emphasizes the importance of the time factor in today's modern conferences:

> "Conferences should be long enough and sufficiently well designed so that they have maximum possible educational impact. Almost a third of the conferences in American Universities last only one day; another third last only two or three days. Such brief meetings, particularly if there is no preceding preparation by participants and no follow-up, have little educative effect. To achieve educational objectives of a worthwhile sort, at least three kinds of developments should take place. First, many conferences should be longer. Second, preparatory and sequential educational activities need to be devised. Third, and most important, conferences must be skillfully planned to take advantage of the time available. With increasing experience and careful studies, universities can learn to make the conference as educative as the classroom or the laboratory."

There are many claims advanced for continuing education experiences in residential settings. Cheek and Gruenfeld[3] describe the latent rewards which may be correlated with management development programs in residential centers. Reduction in power disparity between managers and workers; reduction in personal tension of subordination to higher management; restructuring of prior social relations

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2. Houle, Cyril O., Continuing Education Report Number One, University of Chicago, Chicago, Illinois.
3. Cheek, Neil H. and Gruenfeld, Leopold W., A New Look at Management Training, Transaction, May-June 1965, Washington University, St. Louis, Missouri.

upon return; strengthening of the manager's self-image in identification with the managerial strata; and even "to cool a man out" when he fails to receive an expected promotion are claimed latent rewards.

There is no quarrel with the ingenuity of the reasoning by the authors, but the matter of empirical support for such contentions does seem to merit attention. Many other statements and claims appear in the literature of continuing education for adults without apparent research support.

Researchers in adult education must look systematically at the influence of the residential setting upon adult learning if this new and fast developing educational offspring is to attain full professional stature.

Sicuro[4] in a tangentially related study sampled the freshman population at Kent State University who attended the off-campus centers and the central campus. He interprets his findings to indicate no significant difference in academic potential of the two groups and offers two alternatives to be solved by future research.

> "Further, if it be ascertained through other research that academic center students are little interested in the social life of a campus, and should follow-up studies substantiate that they can succeed in college without partaking of those extra-curricular activities which presumably contribute to the social development of college students, it may be questioned whether colleges need to provide the experiences. Such a possibility even raises doubts about the value of residence on the campus as a requisite for scholarship.
>
> "On the other hand, if further research provides a positive correlation between college success and participation in socializing experiences which a campus ordinarily affords, there are implications herein for expanding the extra-curricular

4. Sicuro, Natale A., A Comparison of Academic Aptitudes, Certain Values, and Personal Background Characteristics of Students in Off-Campus Centers and on Central Campus of the Same University. J. of Educ. Res. Vol 58, No. 5, January 1965.

> provisions at the centers in order to compensate for the lack of activities in the secondary school background of most center students."

Sicuro's subjects were drawn from freshmen attending the central campus at Kent State University and freshmen attending the eleven off-campus centers under the jurisdiction of Kent State. The similarities of the latter group of students to adult students are worth noting. They were economically unable to attend full-time college programs, many were married and employed full time and their courses were scheduled after working hours.

This brief overview provides some pertinent facts and assumptions as background information for the residential study at Bromwoods. Specifically the study was undertaken to measure the impact of social factors upon adult student achievement and attitude change in a credit class of beginning psychology. It was designed to discover information about the amount of learning occurring under standard teaching conditions for an evening division credit class in general psychology as compared with a similar class taught under experimental conditions, which involved two weekends at Bromwoods, the residential conference center of Washington University. It was hypothesized that the closer, more intimate student-teacher and student-student relationships, which would be developed by two weekends together in a residential setting would result in: 1) A significant increase in learning for the experimental class, and 2) Significant positive changes in attitudes for the experimental class as compared with the control class.

Procedure

A Friday night section of a spring semester class in general psychology was selected as the experimental group.

A statement in the University College General Bulletin described the unique class requirements. Each student who registered for the class was given a schedule showing the dates of class sessions to be conducted on campus and those to be conducted at the Bromwoods Residential Center. The first paragraph of the Class Schedule, Appendix I, which begins, "Section 4 of General Psychology etc...." was copied from the description in the General Bulletin. The enrollees in Section 4 seemed to clearly comprehend the special attendance requirements. There were none who initially registered and then withdrew because of failure to comprehend the special nature of the class.

The students were obviously aware that their class had a different meeting schedule than the regular on-campus classes. However, they were given no other information regarding the nature of the research design. The obvious question of "halo effect" is present in this study, as it is in any ongoing class study in which the subjects may feel that theirs is an "experimental" group.

On two weekends during the semester, beginning on Friday evening, the experimental class was transported to Bromwoods, the Washington University Residential Conference Center, 60 miles from the main campus, for a weekend of study and lecture-discussions. The experimental group attended ten classes of regular length on the campus and the equivalent of six classes at the residential center. In the experimental class of 16 students, 13 completed all the required steps of the experimental procedure. During the weekends at Bromwoods, the instructors lectured

to the group on Friday evening, Saturday morning, and Saturday afternoon. The group returned home Saturday evening. The instructors and students ate together, talked informally in the lounges, hiked the nature trails together, and participated in other recreation between class sessions.

A control class of 55 students, enrolled in the Tuesday night section of the same course, was taught by the traditional lecture method. The Tuesday evening instructor and the Friday evening instructor each taught approximately the same one-half of the course content to both classes. The teaching style during the residential weekends was deliberately patterned after the lecture-discussion presentations of the regular on-campus class periods in order to control method of presentation as much as possible.

Experimental and control classes were administered three measuring instruments during the first week of classes. These were an intelligence test, the Wesman Personnel Classification Test; an Attitude Survey, Appendix II, based on Osgood's "semantic differential" concepts; and a 100 item objective test over the course material to be covered during the semester. The latter was administered in order to evaluate the amount of prior information possessed by the two groups.

During the last week of classes both groups were administered, as part of the final examination the same 100 item objective test in order to measure learning during the semester. In addition, the Attitude Survey was readministered.

A final requirement for the experimental class was the completion of an Evaluation Questionnaire at the end of the course. The tabulated responses and supplemental comments are given in the results section.

Chart 1 illustrates the design of the study.

CHART 1

	BEGINNING OF COURSE (PRE) MEASURES				END OF COURSE (POST) MEASURES		
	WESMAN TOTAL SCORE	PSYCHOLOGY PRE-TEST	ATTITUDE SURVEY	TREATMENTS	PSYCHOLOGY POST-TEST	ATTITUDE SURVEY	EVALUATION QUESTIONNAIRE
GROUP 1 EXPERIMENTAL N = 13	X	X	X	ON-CAMPUS LECTURE-DISCUSSION PLUS BROMWOODS RESIDENTIAL EXPERIENCE	X	X	X
GROUP 2 CONTROL N = 55	X	X	X	ON-CAMPUS LECTURE-DISCUSSION	X	X	X

Results and Discussion

A. Initial Measures

There were three measures taken at the beginning of the semester in each class to determine level of intelligence, initial knowledge of general psychology, and attitude strengths. Table 1 contains the comparison of the experimental and control classes on these matters.

Table 1

a. Intelligence (Wesman Personnel Classification Test - Total Score)

Experimental			Control					
N.	M	S. D.	N.	M	S. D.	diff.	t	p value
13	40.08	6.21	55	35.73	10.24	4.35	1.913	.05 > p > .025

b. Initial Knowledge of General Psychology
(100 Item Objective Examination)

Experimental			Control					
N.	M	S. D.	N.	M	S. D.	diff.	t	p value
13	41.62	14.65	55	46.29	7.21	4.67	1.118	N. S.

c. Attitude Survey - Total Score

Experimental			Control					
N.	M	S. D.	N.	M	S. D.	diff.	t	p value
13	5.029	.52	55	4.980	.48	.049	.32	N. S.

It can be seen that there was a significant difference in intelligence at the .05 level in favor of the experimental class. The measures of knowledge of general psychology and attitudes did not reveal a significant difference between the two groups, both probabilities being non-significant. This means that the two groups were equivalent in their knowledge of general psychology and their total attitude scores at the beginning of the semester but that the experimental group was significantly more intelligent.

Accounting for the difference in learning ability between the two groups is rather difficult since no special recruiting efforts were utilized in enrolling the experimental class. It is likely that this is a chance occurrence which would not be present if the study were repeated.

B. Final Measures

At the end of the semester both groups were retested on the 100 item objective test and the Attitude Survey. Only the experimental group completed the Evaluation Questionnaire. The data for the psychology test and Attitude Survey appear in Table 2. The Evaluation Questionnaire analysis is covered in a separate section.

Table 2

a. Final Knowledge of General Psychology

Experimental			Control					
N	M	S. D.	N	M	S. D.	diff.	t	p value
13	68.23	6.40	55	71.16	11.70	2.93	1.24	N.S.

b. Attitude Survey - End of semester

Attitude Measured	N=13 Experimental		N=55 Control				
	M	S. D.	M	S. D.	diff.	t	p value
Total Score	4.78	.78	5.03	.61	.25	1.07	N.S.
Washington University	4.82	.65	5.08	.53	.26	1.35	N.S.
University College	4.82	.84	4.99	.84	.17	0.65	N.S.
College Instructors	4.95	.93	5.16	.63	.21	0.79	N.S.
Evening Students	4.94	.86	4.97	.81	.03	0.13	N.S.
Psychology Classes	4.49	1.29	5.15	.80	.66	1.75	N.S.
Evening School Classes	4.66	.74	4.71		.05	0.21	N.S.

Part a of Table 2 indicates that the two groups did not score significantly different in their final knowledge of general psychology. They knew the same amount at the beginning of the course and at the end had learned the same amount, in spite of the fact that the experimental group was significantly more intelligent. Our first hypothesis that the experimental class would learn more was not borne out by the results. In fairness to the residential program it must be recalled that instruction was controlled by using a rather strict lecture-discussion method

similar to that used on the main campus in the control class. A seminar or conference type instructional format involving a variety of methods might well be considered as an experimental method for a subsequent study.

Part b of Table 2 deals with the objective data of the Attitude Survey. Our second hypothesis of improved attitudes for the experimental group is not supported by this data.

The analysis of the attitude scores shows a marked consistency in measured attitudes for the experimental and control groups before and after exposure to treatments. There were no significant differences present in measured attitude toward Washington University, University College, college instructors, evening students, psychology classes, or evening school classes between experimental and control groups at the beginning or at the end of the study. These results are puzzling in their consistency because no "halo" effect was apparent for the experimental group. This may mean that "halo effect" was not present or that the measuring instrument was inadequate, i.e., not sensitive enough to detect changes. Finally, there is the possibility that the objective findings of the attitude scores were entirely correct and that significant changes in attitude did not occur for either group. The attitude measures used were based on concepts of the semantic differential and permitted a 1 to 9 rating of the attitude being measured. It is obvious to the writers that instruments used to measure changes in adult learning in classroom situations should have some sort of a priori validity established.

C. Evaluation Questionnaire

An evaluation questionnaire was administered to the experimental class at the end of the course. Of the twenty questions on the questionnaire several pertained to attitude change. There was substantial agreement on these questions (11 to 2) that the participants had enjoyed the experimental course and would seek the same arrangements in another course. The same agreement existed in their statements pertaining to the desirability of knowing their instructors and fellow students better.

The disparity which exists between results obtained with the questionnaire and the attitude scales suggests further exploratory studies of adult classrooms in action as well as the development of more effective measuring instruments for sensing change.

Analysis of Questionnaire

One of the formal requirements of this course was the completion of the following questionnaire. Answers given by the thirteen experimental respondents are tallied below:

1. Did you feel that the class meetings at Bromwoods were: (Please check all the appropriate items)

2	A.	Too long
0	B.	Too short
10	C.	About right
3	D.	Stimulating and challenging
1	E.	More breaks needed
0	F.	Highly productive
4	G.	More variety needed in instruction
3	H.	More variety needed in materials presented
1	I.	A waste of time

Additional comments included such statements as the following:

1. The classroom at Bromwoods was more favorable than the campus room.
2. The idea was excellent.

3. Suggest more variety in presentation because the afternoon sessions seemed too long.
4. More direction was required in group discussions.
5. Many liked the Bromwoods sessions because they provided a welcome "change of pace" and provided the opportunity for more variety in presentation of material.

2. Was there a difference in your ability to master the material presented in this residential experience as compared to the traditional classroom situation with which you are more familiar? 7 yes; 6 no. In what ways were there differences?

The group was evenly divided on this question. Those answering "yes" gave the following additional comments:

1. The experiment provided more continuity of classwork.
2. The material was easier to understand by having blocks of it presented all at once.
3. The class was more interesting and thus it was easier to study; the time seemed to pass more quickly.
4. I was more enthusiastic about going to class.
5. I got to know my classmates better. The atmosphere at Bromwoods was more conducive to study and to questioning during the lectures.
6. The classes at Bromwoods were more relaxing due to the casual dress and the good food. The wide open spaces were conducive to study. I felt well rested.

Those who answered this question negatively gave as their reasons the following:

1. I did not master the material because I felt the time between class periods was a vacation and reacted to it as such.
2. I preferred the constant association with the material which the weekly class provided.
3. The routine of weekly study habits were easily broken by 4 week intervals...telescoped learning fades faster.

3. Did the longer than normal intervals between classes on campus create any special problems for you? 3 yes; 10 no. If so, what problems were created?

Only a few felt any special problems were created by this format. Those statements which were enumerated are as follows:

1. The time between the classes was looked upon as a vacation with the time being used for other purposes.
2. I felt I was on my own most of the time and my questions had to be postponed for long intervals. This experience was very challenging to the individual, however.

3. It was very difficult maintaining continuity between class meetings. It was not easy to keep up with the assigned readings.

4. As adults, do you feel that your creative abilities were stimulated by this experimental format of class presentation? 6 yes; 7 no. Why or why not?

Again, the group was evenly divided on their answers. Those who felt their creative abilities were stimulated gave the following comments:

1. Yes, this course was different from the traditional course in a constructive way.
2. The pleasant atmosphere of the center was more conducive to thinking about psychology.
3. There was a close relationship among class members which eliminated inhibitions and produced more creative discussions in class.
4. The informal atmosphere was more conducive to discussions and thinking was stimulated.
5. Having classes at Bromwoods created closer relationships between class members and instructors.
6. This was more true during the second weekend at Bromwoods.

Negative responses were categorized into the following statements:

1. I can't answer this because I can't think of any beginning class as being particularly creative unless projects requiring creativity are assigned.
2. There was no communication between the class and the instructors. I had no direct contact with the instructor.
3. There were rather dull lessons. The instructors charged through without permitting individual creativity to emerge.

5. Would you like to take another course in the future using this same format of some classes on campus and some at Bromwoods? 11 yes; 2 no. Why?

On this question the group was fairly well agreed that they would like to repeat this experience. In support of their affirmative answer the following additional comments were related:

1. The periods were too long but I think the idea has possibilities.
2. Suggestions for future courses which might be adopted to the Bromwoods plan included: botany, marketing, advertising.
3. Knowing what to expect I could get more from the next course.
4. More effort can be devoted to the course due to the continuity of time.
5. Yes, I would be interested in other courses providing there was more variety of material presented even though I wasn't too pleased with the results of this one.

6. It was interesting and enjoyable and made learning easier.
7. I liked the country atmosphere and found it easy to relax. In so doing I was more able to concentrate on the subject.
8. The course provided something different; it provided change and variety of routine.
9. I liked the setting and the presentations.
10. The weekend classes were pleasant experiences and I like to identify with pleasant happenings.

Those answering "No" include the following responses:

1. No, I liked Bromwoods but I really feel that more can be accomplished in regular sessions.
2. The long interval between classes was not desirable.
3. It was too far to go and the Bromwoods classroom facilities were not as good as those on the main campus.

6. Do you feel that it was easier to remember material which you learned in this course than it was to remember material learned in other classes? 4 yes; 9 no.

The negative responses may be grouped as follows:

1. Remembering is the same no matter where it is learned.
2. The telescoping of sessions made it more difficult to remember the material.
3. I found it very difficult.
4. The course was basically all rote memory. I could have learned as much by reading the material on my own.
5. I didn't learn as much as I would have on campus.

The affirmative answers included:

1. Psychology is one of my favorite subjects and it was easy to remember in this context.
2. The classes certainly weren't dull and the discussions reinforced the material read in the text.
3. I definitely learned more.

7. Did you have to change your normal study methods to adapt to this class? 6 yes; 7 no. If so, what did you do that was different?

The group was again fairly equally divided on this question. The indications are that half of them actually changed their study methods from previously conceived patterns in order to master the material. The other half, either did not feel that their old methods were inappropriate or else merely failed to make the necessary adjustments. Affirmative answers were supported by the following replies:

1. I was unable to take meaningful notes for review, therefore, I had to rely entirely on the book.
2. A more detailed review was necessary for me as I did not retain as much from the Bromwoods course as I do from campus courses.
3. Concentrated efforts had to be made for the Bromwoods course and then I found myself neglecting my other studies for the three-week period. Continuity in study was difficult to maintain.
4. I had to rely entirely on the text as the tests did not cover the lecture material.
5. I had to take time off from work in order to prepare adequately.
6. I studied more and did more reading at Bromwoods than at other times.

Those answering "No" said in addition:

1. I could not change my habits as I had other studies to maintain.
2. If I were to attend a similar course I would definitely change my study habits... I would plan more adequately for my reading periods and I would study more.

8. Do you feel that the longer reading assignments which were given for the Bromwoods weekends were: (Check any which apply).

5 A. More difficult to complete.
3 B. More difficult to comprehend in such a short time span.
4 C. Kept up easily even though the class didn't meet every week.
4 D. Difficult to plan for.
4 E. Difficult to remember.

All but four experienced some added difficulty with the longer reading assignments. Some made additional comments as follows:

1. I study at my own rate, therefore, I noted no significant difference.
2. The reading was difficult to complete because I didn't plan ahead. I can plan better now as a result of this experience.
3. The reading assignments were not augmented with the lectures.
4. I didn't read all of the material before class.
5. There was no difference. We were assigned a chapter a week whether the class met together or not.
6. I feel that if I had read each chapter before class I would have understood the lectures better. As it was I had to recall the lectures as I read the material later.

9. What recommendations would you make which would have made the class more meaningful to you: (Check all that apply).

1	A.	At Bromwoods, less time in formal class sessions with more time for recreation.
3	B.	All classes on campus.
5	C.	Classes every week over a shorter period of time.
4	D.	More weekends at Bromwoods.
0	E.	All sessions at Bromwoods.

In general the group was satisfied with things as they were. No one recommended that all sessions be given at Bromwoods and only three thought that all sessions should have been given on campus. Five would have preferred to meet every week with four going so far as to recommend more meetings at Bromwoods. In support of these decisions the group added the following comments:

1. I would suggest fewer lectures at Bromwoods with more time for reading, for discussion, and project work.
2. Have the class meet every week with the two additional weekends planned at Bromwoods.
3. Provide a ten-minute break each hour and cut down on the lunch hour.
4. Extend the lectures to 5 p.m. on Saturday and then all stay until Sunday noon providing for informal times to talk with the instructors and other students.
5. Use the same format but provide more variety in materials from outside sources. Bring in guest lecturers.
6. The last half of Saturday afternoon should be spent in meaningful discussion.
7. The lecturers should explain the reading material.
8. The intervals with no scheduled classes should have come before the Bromwoods weekends rather than after.
9. I found one of the instructors difficult to follow.

10. Did the course meet your expectations? 5 yes; 7 no; 1 no answer. What were your expectations for it and in what ways were they met or not met?

Half of the experimental group found that their expectations were not met. They told why with the following comments:

1. I expected more experimental teaching methods. Instead we were subjected to the traditional lecture method.
2. I felt one of the instructors was more interested in politics than in Psychology 9-206.
3. My first course in psychology was so enjoyable that I was eager to try this course. I was disappointed and don't believe I will continue in psychology.
4. The course was disappointing in that it was no different from any other.
5. The material could have been covered in a more meaningful way.

Those who felt the course met their expectations gave as their reasons the following:

1. It sounded difficult and it was.
2. To learn basic psychology and these expectations were met.
3. I found I got to know my classmates better and I really thought more about psychology than I would normally have.
4. I expected an overview and I got it.
5. I expected to learn more about psychology and I believe I did.
6. Classes at Bromwoods proved very enjoyable. A pleasant change of atmosphere.
7. I obtained an insight into human behavior from the course that would otherwise have been impossible.
8. It met my expectations because I didn't know what to expect.
9. My expectations were to be able to read and study and to pass.

11. Did the format of the course meet with your approval? 7 yes; 5 no; 1 no answer.

More than half of the group expressed favor with the format of the course and elaborated in the following:

1. The drudge of rote learning was not present.
2. I thought the format was well planned and had good continuity.
3. I liked having two instructors.
4. Could not have been improved in my opinion.
5. It was similar to a campus course but I liked it because it was different.

Those who answered negatively expressed their reasoning definitely and explicitly as follows:

1. The three week break between the Bromwoods classes was nice but the course would have been better without them.
2. It was no different from the traditional format except that it was dull.
3. I feel that the long periods in classes caused the students to "tune out" sooner.
4. The instructors didn't relate to the text enough.
5. The continuous psychology lectures and the movies made it difficult to concentrate on anything else.
6. Actually, the classes were conducted the same as on campus.

12. How did you feel about the instruction of this course? Replies were tallied and categorized as follows:

A. In terms of lectures --- generally good.
B. Discussions --- satisfactory but not always significant.
C. Assignments --- good, fair and reasonable.
D. Examinations --- fair, but too difficult.

13. Did you enjoy being a part of this experimental class?
__11__ yes; __2__ no; Why?

Interestingly enough despite some rather bitter criticism on earlier questions all but two enjoyed being a part of this class.

Those who didn't enjoy it stated:

1. I didn't enjoy it. It was boring.
2. I'm disappointed in the benefits derived from the course.

The affirmative supporters went on to say:

1. It gave me some free Friday evenings and also enabled me to know my classmates better. The days at Bromwoods were pretty and thus conducive to study. I hope this is continued.
2. An expense paid weekend is always gratifying.
3. It added adventure to the course and made it more exciting.
4. I wanted to see how differently the course would be conducted and I wanted to see Bromwoods.
5. I enjoyed the experience but the course would have been more rewarding if psychology had been taught rather than trying to prove it as a science.
6. It was an enjoyable and interesting way to earn 3 credits.
7. I liked the opportunity to try something new.
8. It's always good getting away from rote learning.
9. My classmates were extremely interesting as was the residential setting.
10. I liked the instructors and fully enjoyed the weekends at Bromwoods.

14. Do you feel that you gained as much or more from this section as you would had you attended a section which had all their sessions on campus? __5__ yes; __7__ no; __1__ don't know.

Five felt they acquired as much from this course as one on campus even though in an earlier question 5 people suggested perhaps all sessions on campus would have been better.

Those who commented briefly on this question stressed that more variety in presentation and in material would have added significantly to their interest and understanding.

15. Knowing what you know now, do you wish you had chosen another section which had all sessions on campus? __4__ yes; __8__ no; __1__ no response.

Two-thirds of the group would not have chosen another section but expressed favor with their selection. The negative responses included the following:

1. The only thing I got from the course was what I read in the book.
2. I probably would have learned more from another instructor.
3. I retain more from regular class meetings.

The affirmative respondants commented further in support of the course as follows:

1. I enjoyed it for its own sake and because I like new things.
2. The weekends at Bromwoods were more pleasant than the meetings on campus.
3. The weekends at Bromwoods provided an opportunity to become better acquainted with the instructors and the other students.
4. The meetings at Bromwoods saved me 500 miles of driving as I live in that area.

16. Do you feel that you had an easier time in earning 3 hours of credit than the campus sections of beginning psychology? Why? __2__ yes; __10__ no; __1__ no answer.

Very few felt that they had an easier time than the other sections. Replying negatively implies they felt they had a more difficult time than others. One person who had taken the course on the campus replied that he felt this section was definitely easier. Other responses were:

1. The monotony of learning was not present in this place.
2. I just hope that I earn 3 units.
3. I'm not interested merely in credit but in learning.
4. I would have liked to have gotten more from the class personally.

17. What do you feel would be the right size for a class of this kind?

The responses were tallied as follows:

(10-15) - 4; (15-25) - 8; (25-30) - 1

In general, most felt their class size was about right in order to insure ease of class discussion.

18. Are there other subjects which you feel more appropriate for the residential experience? __8__ yes; __5__ no. If so, what?

More than half of the group felt there were other courses more appropriate to this kind of experience and elaborated as follows:

1. All subjects could be conducted in this locale.
2. Classes in marketing, advertising, human relations, etc. The relaxed and informal setting at Bromwoods could provide a perfect study place for these subjects.
3. Languages, English, history and political sciences, botany logic, business courses, maybe sciences and math, (lab sciences if the experiments could be run), personnel, biology, business administration.

4. Seminars or more advanced subject matter.
5. Subjects that allow for greater participation both inside and outside of class. A tremendous idea for art classes as well as those permitting discussion.

19. What did you think of the Bromwoods Center? How were your quarters? How was the food? Is it the kind of place you would like to visit again?

Each of the students was quite complimentary about their physical accommodations, the employees, the food, setting, etc. Most agreed that their experience had been pleasant and that they would like to return. Their comments include the following expressions:

1. I liked the Center very much, nice rooms and good food. It could not be better.
2. It was quite satisfactory and I would definitely enjoy having other classes at Bromwoods.
3. I gained two pounds and drank enough coffee to sink a ship but I would like to return.
4. Extremely nice, well kept and worthwhile.
5. Very relaxing.
6. Would enjoy an occasional visit.
7. Beautiful - an ideal location.
8. Bromwoods was fantastic. We were treated royally. Our food was delicious. It would make an excellent motel.

Not all had words of praise; there is always the other viewpoint expressed in these remarks.

1. The classroom facility was below par.
2. The food left a bit to be desired.
3. The Center was small for hiking. It was not as isolated as people say, but then I live in the area and am more familiar with it. I didn't like the seafood on Friday.

20. Did you feel that the residential experience enabled you to know your instructors better? 12 yes; 1 no. How helpful do you think this was to you as a student? In what ways was it helpful?

All but one in the group felt he got to know his instructors better through this experience. Four indicated that knowing their instructors better really was not too helpful. One went on to say it wasn't helpful but it was interesting. Those feeling it was helpful expressed themselves in these ways:

1. I think more intimacy leads to better learning.
2. If an instructor is truly interested in his subject the closer the student is to him the more he is likely to absorb some of his interest and understanding - becoming familiar with more mature attitudes held by his teachers is always helpful.

3. It was very helpful. It enabled us to talk more freely with them. The complexities of the course could be explained in a more informal situation. Informal group discussions always add to a class, you get to understand your instructors better. Informality helped to break down the barrier that exists between the instructor and the student. If you know your instructor better there is a tendency to be more casual and relaxed and thus to be in a better position to absorb the material. Inhibitions were broken down thus increasing creativity and the flow of general communication.

21A. Did you feel you became better acquainted with your classmates? 10 yes; 2 no; 1 no answer. How helpful was this? In what ways?

Two people out of the group felt they did not get to know their classmates better. Those who stated that they got better acquainted with the others in their class found this to be helpful in the following ways:

1. I got better acquainted with my classmates and it made the classes more enjoyable, increased discussion outside of class and made studying in groups better.
2. It was interesting and pleasant and made it easier for learning to be exchanged.
3. I was glad for the opportunity to see if my impression of the class followed the general impressions.
4. I learned some of their interests and enjoyed their company.
5. It makes the course a little more bearable but I can't say it was helpful.

Those giving negative responses concluded that:

1. It wasn't too helpful at all. (4 replies)
2. I got better acquainted with my classmates that met regularly in class every week. We had a great time at Bromwoods but the long period between made it almost like meeting strangers again.

21B. If so, did you like this opportunity to know your classmates better? 11 yes; 2 no. Did you develop closer relationships with any of your classmates? 5 yes; 3 no; 1 not much; 4 no answer.

The students, at least 11 of the 13, were pleased with the opportunity afforded by the residential experience to know each other better and five went so far as to state that closer relationships developed than were possible in the traditional classroom situation.

22. Do you feel the instructors were interested in you as individuals? 6 yes; 7 no.

The group was fairly evenly divided on this question. One student related that he felt he got double talk in answer to his questions while another stated that the teachers seemed more interested in proving why they had chosen psychology as their field than in teaching what psychology is.

Summary Comments:

Please write your summary comments giving your total impression of this residential experience together with any suggestions which you may have for similar classes to be held in the future. Use the back of this page for your comments. Your cooperation in completing this questionnaire is appreciated.

The following comments were submitted:

1. It was great fun but I think I comprehended more in the conventional classroom.
2. A very exciting step forward in handling of night school classes. For most students night school can tend to be routine and impersonal. As teachers and students become better acquainted, the class becomes more pleasant.
3. I liked the sessions and wish we had more free time to use the Bromwoods facilities.
4. I hope weekends like this continue but I don't believe it is easier to learn merely by being placed in a different environment. Discussion opportunities are important.
5. The residential experience was by itself fulfilling and rewarding. The course itself was a waste of time and money because too much time was spent defending psychology.
6. Psychology seems more interesting to me but it is difficult to say how much of my favorable attitude is due to the format and how much to the subject. I would have liked more variety of instruction with time for small groups to work on experiments, etc.
7. I liked Bromwoods and thought the residential experience was a good one. It is ideal for activities stressing group dynamics. I am a bit disappointed with the course and didn't like having two instructors - somehow, I was a bit confused by it all.
8. The time and effort proved rewarding because monotony was absent. Discussion was easy and the teachers were closely interested in the students. The relationship of student to student was much closer. Being able to study without household distractions and to be able to discuss with others anytime was very much worthwhile.
9. I would like to take another course at Bromwoods.
10. I had high hopes for the course and was disappointed in the instructors. They had other things on their minds more important than this course. I heard much criticism of the instruction but praise for the residential experience.

Summary and Suggestions for Further Research

The Bromwoods Study represents an attempt to introduce adult students into a favorable social milieu which it was hypothesized would produce a significant increase in learning and would result in significant positive changes in attitudes. The objective measures employed did not indicate significant changes in either. In the attitude realm the fact that no change occurred was examined also from the standpoint of the sensitivity and validity of the instrument used.

A further consideration concerns the continued application of criterion measures over time. No difference at the time of final examination cannot be construed that no difference in retention will exist. Future research may well measure the amounts of material retained at different time intervals, such as 30 or 60 days, 6 months, etc., as a function of the two treatments, i.e., the residential learning experience versus the on-campus learning experience.

The factor of the amount of time which students and instructor were together in the residential experience was not a variable directly under study in this research. However, the lack of significant findings does suggest the need of additional studies in which scholars and instructors are brought together in residential settings for varying periods of time.

The subjective appraisals obtained by the evaluation questionnaire provide interesting insights into the students' reactions not measured by the attitude survey. These in part tend to suggest a positive affective value for the residential experience. The disparity which exists between the subjective results of the evaluation questionnaire and the results of the objective attitude measure suggests further studies of

adult classrooms in action with careful attention being given to the development of valid and effective measuring instruments for sensing change.

The Bromwoods Study utilized the lecture-discussion method in the treatments applied to the control and experimental classes. This was done as an attempt to control method of instruction as a variable. Proponents of residential learning can raise a valid challenge against this method as not being the "natural method" for producing the most effective results in residence. Future research studies are needed in which different methods of instruction are used such as the seminar, the discussion groups, the workshop or the conference format.

Brownell[5] touches on some of these problems in an insightful discussion of the evaluation of learning under different kinds of instruction. His discussion covers the complexity of evaluative research; the need for judgment by the experimenter; and the "common sense" evaluation of findings of statistical significance. In the latter sense criterion measures need to be developed that not only satisfy experimental rigor but also have implications for eventual practical applications to ongoing learning situations.

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5. Brownell, William A. The Evaluation of Learning Under Differing Systems of Instruction, E. L. Thorndike Address, Educational Psychologist, Vol. 3, No. I, November 1965.

APPENDIX I - Class Schedule

GENERAL PSYCHOLOGY 9-206, Section 4

Section 4 of General Psychology will participate in a program which involves periods of residence training at Bromwoods, the new conference center of Washington University. Those registering for this section will have a portion of their classroom instruction conducted at Bromwoods which is located near Lonedell, Missouri. Bromwoods will provide an unusually pleasant setting for this kind of activity. Enrollment will be limited, however, to the capacity of Bromwoods.

The following class schedule is required for all registrants in this section:

1. Feb. 7, 14, 21, 28, Mar. 6 on campus, 7-9:30 p.m. Fridays, Eads 102.

2. March 13-14 (Friday evening beginning at 6 p.m. through Saturday 3:30 p.m. will be spent in classes at Bromwoods.)

3. March 20 and 27 - no class sessions; April 3, Spring vacation, no class.

4. April 10 and 17 class meets on campus, 7-9:30 p.m. Fridays, Eads 102.

5. April 24-25 (Friday evening classes 6 p.m. through Saturday 3:30 p.m. at Bromwoods.)

6. May 1 and 8 - no class sessions.

7. May 15, 22, 29 class meets on campus, 7-9:30 p.m. Fridays, Eads 102.

There will be no extra charge for the six meals and two nights lodging involved in the two residential week-ends. Transportation problems can be worked out in class for those who may find it difficult to get to Bromwoods. Instructors: Vanderplas and Buckhout.

Attached: Bromwoods brochure

APPENDIX II

WASHINGTON UNIVERSITY
University College

ATTITUDE SURVEY

NAME _____

The purpose of this instrument is to measure your attitudes toward certain concepts by having you judge them against a series of descriptive scales. In marking the scales, please make your judgments on the basis of what these things mean to you. Here is how you are to use these scales:

If you feel that the concept is very closely related to one end of the scale, place a check mark as follows:

fair ✓ : : : : : : unfair

The direction toward which you check depends upon which of the two ends of the scale seem most characteristic of the thing you are judging. Place your check marks in the middle of the spaces and not on the boundaries.

We are interested in your first impressions so do not puzzle over individual items or spend too much time on them.

Washington University

dynamic : : : : : : static

genuine : : : : : : pretentious

productive : : : : : : sterile

rough : : : : : : smooth

severe : : : : : : lenient

strong : : : : : : weak

desirable : : : : : : undesirable

familiar : : : : : : strange

powerful : : : : : : powerless

constricted : : : : : : spacious

Harvard : : : : : : Podunk

University College

easy : : : : : : difficult

stimulating : : : : : : boring

valuable : : : : : : worthless

colorful : : : : : : colorless

progressive : : : : : : regressive

thick : : : : : : thin

empty : : : : : : full

College Instructors

sophisticated	———————	naive
candid	———————	hypocritical
creative	———————	unimaginative
open	———————	reserved
flexible	———————	rigid
objective	———————	subjective
fair	———————	unfair
interested	———————	disinterested
active	———————	passive
optimistic	———————	pessimistic
quiet	———————	boisterous
informed	———————	uninformed
sober	———————	frivolous
profound	———————	superficial
spontaneous	———————	controlled
personable	———————	wooden
admired	———————	disliked

Evening Students

sharp	———————	dull
intelligent	———————	stupid
ambitious	———————	lazy
interested	———————	bored
confident	———————	scared
fast	———————	slow
decisive	———————	indecisive
social	———————	unsociable
active	———————	passive
ignorant	———————	learned
successful	———————	unsuccessful

Psychology Classes

reputable	———————————	disreputable
meaningful	———————————	meaningless
safe	———————————	dangerous
deep	———————————	shallow
wholesome	———————————	morbid
precise	———————————	vague
honest	———————————	dishonest
definite	———————————	ambiguous
contributing	———————————	hindering
concrete	———————————	abstract
logical	———————————	illogical
harmonious	———————————	dissonant
clean	———————————	dirty
beautiful	———————————	ugly

Evening School Classes

simple	———————————	complex
effective	———————————	ineffective
rich	———————————	poor
exciting	———————————	dull
planned	———————————	unplanned
sweet	———————————	bitter
provocative	———————————	lethargic
high	———————————	low
emotional	———————————	unemotional
prepared	———————————	spontaneous

UNIVERSITY COLLEGE RESEARCH PUBLICATIONS

1. Strengthening the Residential Adult Education Experience. Sponsored by the Conference and Institute Division of the National University Extension Association, The Center for the Study of Liberal Education for Adults, and University College, November 1962, 62 pp.

2. Objectives and Methods of Research in Adult Education. Edited by Philip H. DuBois and King M. Wientge, May 1962, 51 pp.

3. Studies of Biographical Data in Adult Education. Philip H. DuBois and King M. Wientge, August 1963, 8 pp.

4. Strategies of Research on Learning in Educational Settings. Edited by Philip H. DuBois and King M. Wientge, February 1964, 74 pp.

5. Factors Associated with the Achievement of Adult Students. King M. Wientge and Philip H. DuBois, 1964, 39 pp.

6. Survey of Tuition Aid Plans of Business, Industry, and Government in Metropolitan St. Louis. King M. Wientge and Malcolm Van Deursen, June 1965, 12 pp.

7. Workshop for Counselors and Educators Concerned with the Education, Training and Employment of Minority Youth, Final Report, Part I: Development, Program, Evaluation. King M. Wientge, October 1965, 71 pp.

8. Workshop for Counselors and Educators Concerned with the Education, Training and Employment of Minority Youth, Final Report, Part II: Discussion Guide to the Problems of the Culturally Deprived: An Introduction for Teachers and Counselors. John M. Whiteley and King M. Wientge, November 1965, 71 pp.

9. Criteria in Learning Research. Edited by King M. Wientge and Philip H. DuBois, 1966, 65 pp.

10. The Influence of Social Climate on Adult Achievement: The Impact of a Residential Experience on Learning and Attitude Change of Adult Students Enrolled in an Evening Credit Class King M. Wientge and James K. Lahr, 1966, 26 pp.